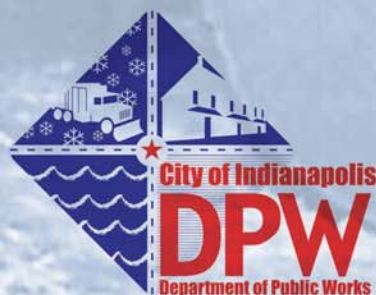


City of Indianapolis
Department of Public Works

Executive Summary

Raw Sewage Overflow Long Term Control Plan and Water Quality Improvement Report

September 2006



Introduction

This document summarizes the City of Indianapolis plan to reduce sewage overflows and meet Clean Water Act requirements to modernize its sewer system. Through this plan, the city is poised to make the largest investment in clean water infrastructure in its history.

The complete plan is contained in the *Combined Sewer Overflow Long-term Control Plan and Water Quality Improvement Report*. This plan has been revised, expanded and updated since the city developed its first plan in 2001 to respond to comments and requirements imposed by the U.S. Environmental Protection Agency (U.S. EPA) and the Indiana Department of Environmental Management (IDEM). The city's 2001 plan was based upon 85 percent capture of sewage during wet weather and approximately 12 overflow events in an average year at a cost of \$1.1 billion. The revised plan will capture 95-97 percent of sewage during wet weather, resulting in overflows during approximately 2-4 storms in an average year. The revised plan has an estimated cost of \$1.73 billion in 2004 dollars. The city plans an additional \$64.3 million in watershed improvement projects that are not a required part of the long-term plan, for a total clean water investment of \$1.8 billion over 20 years.

The city has not waited for the plan's final completion before taking action to clean our streams. We have already invested tens of millions of dollars to implement projects that are approved by U.S. EPA and IDEM. These "early action projects" include storage tanks, treatment plant improvements and sewer system improvements that have already cut annual overflows by more than 145 million gallons per year.



Typical raw sewage overflow location along a Marion County stream.



The White River in northern Marion County.

Photo by Stephen Sellers



Netting structure used to capture floating trash from sewer overflows.

What is the Problem with our Sewers?

More than 100 years ago, Indianapolis built its first sewer system to carry stormwater away from streets, homes and businesses. When indoor plumbing came along, sewage lines from homes and businesses were hooked to these same sewers, combining stormwater and sewage in one pipe and sending it directly to our rivers and streams. These “combined sewers” were state of the art at the time. Most communities did not even have sewers back then.

As sanitation engineering techniques improved and the city grew, the city built wastewater treatment plants to treat the sewage. During dry weather, the combined sewers have the capacity to carry all sewage to the city’s two advanced wastewater treatment plants. However, during rainstorms, stormwater often overloads the sewers and treatment plants. When this happens, the sewers are designed to overflow into nearby streams and rivers. If the sewers didn’t have this overflow ability, raw sewage would back up into people’s basements and onto streets. **Figures 1 and 2** show how a combined sewer works in dry and wet weather. You can see an animated version of this graphic on our Web site at www.indycleanstreams.org.

In new neighborhoods today, we build separate sewers for stormwater and sewage. However, combined sewers remain in many of the city’s older neighborhoods. Raw sewage overflows are a major cause of wet-weather pollution in portions of White River, Fall Creek, Eagle Creek, Pleasant Run, Bean Creek, Pogues Run, Lick Creek and State Ditch.

Raw sewage overflowing into our streams is a health hazard, smells and looks disgusting, affects our environment and harms the quality of life in our neighborhoods. Raw sewage uses oxygen in the water that fish need to breathe. High bacteria levels from untreated sewage make streams unsafe for adults and children to wade or play in.

Other pollution sources contribute to high bacteria levels in our streams, including failing septic systems and urban stormwater runoff. A 1996 study noted that most tributaries in Marion County exceed the *E. coli* bacteria standard during dry weather 20 to 40 percent of the time, or more. Failing septic systems are a primary source of dry-weather bacteria in our waterways.



Figure 1- Combined Sewer in Dry Weather

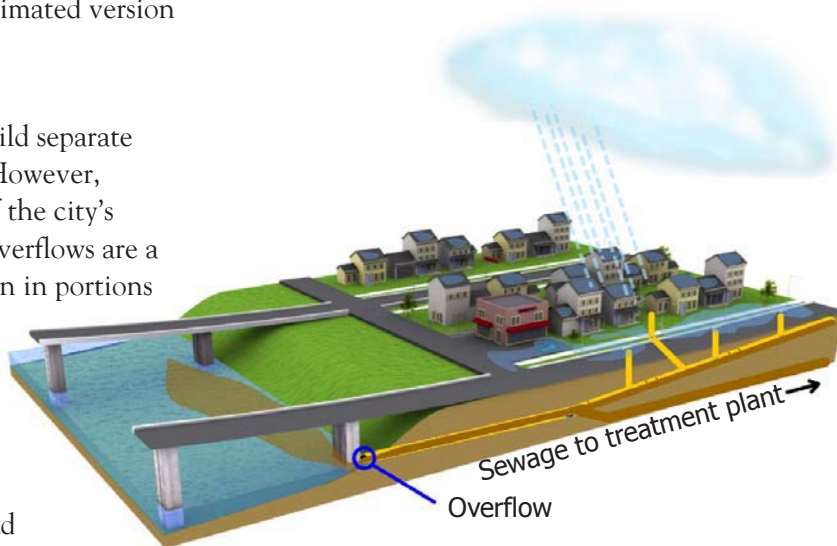


Figure 2- Combined Sewer in Wet Weather

What Do We Know about Our Waterways and Sewers?

The City of Indianapolis manages the wastewater collection system serving most of Marion County. Both combined and separate sewers carry wastewater to a network of “interceptor” sewers. These interceptors then carry wastewater to the Belmont and Southport advanced wastewater treatment facilities.

The combined sewer system contains more than 130 outfalls that overflow into our streams during wet weather. **Figure 3** shows the combined sewer area and the locations of sewer overflows in Marion County. Outside the combined sewer area, most neighborhoods are served by separate storm and sanitary sewers. Also, an estimated 30,000 properties are served by private septic systems.

Water quality in Marion County’s streams has improved significantly since Congress first passed the Clean Water Act in 1972, yet we face many remaining challenges to achieving the nation’s clean water goals.

Studies of Indianapolis waterways and the sewer system have found:

- During some rainstorms, parts of Fall Creek and the White River do not meet the state’s standard for dissolved oxygen, which fish need to breathe. In the past, the problem has been severe enough to cause fish kills.
- Because of high bacteria levels, streams affected by sewer overflows and stormwater runoff have never supported safe swimming or water recreation.
- IDEM and the city have identified high concentrations of *E. coli* bacteria in White River, Fall Creek, Eagle Creek, Pleasant Run, Pogues Run, Bean Creek, and State Ditch. *E. coli* is an indicator that human or animal waste is in the water and can come from many sources, including raw sewage overflows and stormwater runoff. Even Marion County streams that are not affected by sewer overflows are impaired for *E. coli*, including

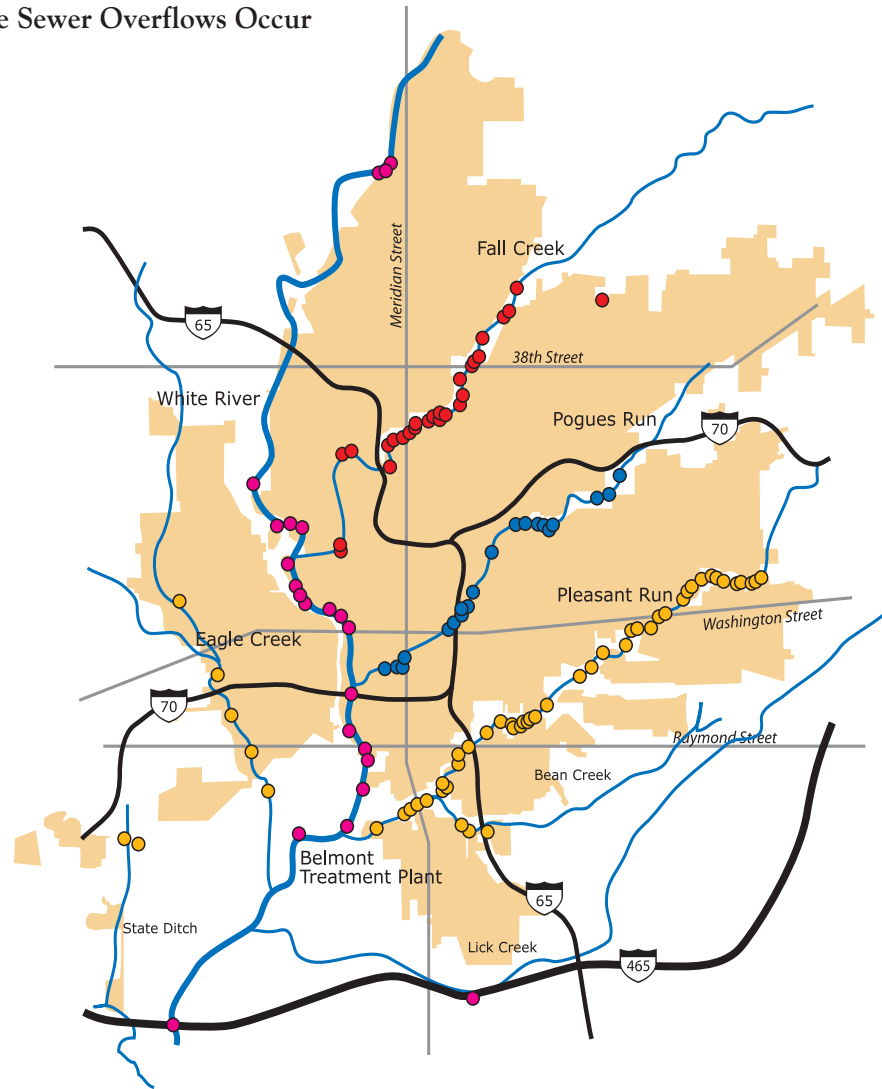
Dollar Hide Creek, Fishback Creek, and Mars Ditch.

- Although sewer overflows are a large source of wet-weather pollution, other sources contribute to water quality problems, including urban stormwater, failing septic systems, pets, wildlife, urbanization and upstream pollution. For example, between 19 and 44 percent of dry-weather samples of our urban streams do not meet state bacteria standards. Sewer overflow control alone cannot fully address this serious water quality challenge.
- Even if sewer overflows were eliminated, the other current pollution sources would still prevent most urban streams and rivers in Indianapolis from being safe for water recreation, especially during wet weather.

In addition, large storms make Indianapolis streams too deep and fast to be safe for swimming at certain times. A city ordinance prohibits swimming in non-designated waterways in Marion County, including all streams in the combined sewer area. Signs and other educational programs by the Department of Public Works and Marion County Health Department also warn citizens to avoid contact with streams in the sewer overflow area due to sewage pollution.

Nevertheless, some people do recreate in streams affected by raw sewage. Occasional swimming and wading are reported in some areas downstream of sewer overflows. However, these activities are not likely to occur when streams are flowing dangerously fast and deep during and after certain large storms. The city’s plan seeks to protect our waterways during and following smaller storms, when people may actually use the streams. We will also try to improve dry weather problems, but these are generally unrelated to wet weather combined sewer overflow control.

Figure 3 - Where Sewer Overflows Occur



Where Do Raw Sewage Overflows Occur?

This map shows the location of sewer overflow points throughout the city. The orange area shows where neighborhoods are served by combined sewers. The multi-colored dots show sewer overflow locations. Even if you live outside the combined sewer area, your sewage may be going through that area and affecting the streams during a storm.

The affected areas include:

- White River, from 56th Street on the Indianapolis northside to State Road 58 near Elnora;
- Fall Creek, from Keystone Avenue to the White River;
- Eagle Creek, from Michigan Street on Little Eagle Creek to the White River;
- Pogues Run, from 21st Street to the White River;
- Pleasant Run, from Kitley Avenue to the White River;
- State Ditch, from Southern Avenue to the White River;
- Lick Creek, from Madison Avenue to the White River;
- Bean Creek, from Interstate 65 to Pleasant Run.

What Are the City's Goals for Improving Our Streams?

The city is seeking to restore beneficial uses of our streams and to protect waterways from sewer overflows when people are most likely to use them. The city also wants to ensure that dollars are spent wisely on cost-effective projects that have tangible benefits to human health and the environment.

Therefore, our goals include:

- reducing sewer overflows when people are most likely to be in the streams,
- improving our streams to support fish and other aquatic wildlife,
- improving the quality of life in our neighborhoods by reducing odors and capturing the unsightly materials found in overflowing sewers, and

- coming into compliance with state and federal Clean Water Act permit requirements.

Because water pollution has many causes, we need an integrated, watershed-wide effort to achieve all of our water quality goals. State and regional cooperation will be needed to resolve stormwater runoff and other difficult-to-control water pollution sources. Indianapolis wants to ensure that affordable investments in water pollution control will yield the greatest benefit possible for human health, the environment and the citizens who live in and downstream of Marion County.



Photo by Stephen Sellers

A heron takes flight along a Marion County stream.



East Bank Storage Tank under construction along White River.



Crews working on a sewage overflow reduction project along Michigan Street near Pogues Run.

What Solutions Did the City Consider?

Indianapolis has reviewed a wide variety of technologies to better control raw sewage overflows. Many of these technologies have been tested and proven successful in other communities. The city sought overflow solutions that were technically sound, easy to operate, affordable and beneficial to water quality and public health. The city also sought solutions that would be least disruptive to neighborhoods and commercial areas where projects will be built.

To test different solutions, the city has developed computer models that imitate the sewer system and streams. These models are used to predict the benefits of different overflow control alternatives.

Before selecting its final plan, the city used the models to evaluate a wide range of technologies and controls, including:

- Measures to reduce overflows or pollution at its source, such as improving stormwater management, sewerage unsewered areas, improving industrial pretreatment and increasing public education.

- Controls within the existing sewer system, such as inflatable dams, local sewer separation; and controlling illegal clear water connections to the sewer system, such as downspouts and sump pumps.
- Storage technologies, such as underground storage tanks and tunnels that would store raw sewage during a storm – sending it to treatment plants after the storm for treatment.
- Wet-weather treatment technologies that treat overflows along a stream or at a central treatment plant.
- In-stream methods for improving oxygen levels, such as fountains, dam modifications or dam removal.

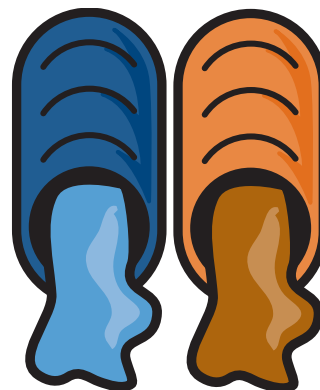
The city combined the best technologies into three overall plans for reducing sewer overflows, as described on pages 8 and 9.



Plan 1



Plan 2



Plan 3

What Were the Final Options for Improving the Sewer System?

The city's final options for sewer overflow control were developed into three systemwide plans:

Plan 1: Storage and Conveyance



Plan 1 would involve a single deep tunnel along White River and Fall Creek, underground storage tanks and new sewers to capture raw sewage that would otherwise overflow into the streams. The tunnels and tanks would store the sewage underground until after a storm, when the captured sewage would be pumped to the city's treatment plants. The treatment plants also would be expanded. The city evaluated five different sizes for these facilities, achieving 90, 93, 95, 97 or 99 percent capture of sewer flows in a typical year. Total costs ranged from \$1.44 billion to \$3.02 billion, depending on the size of the facilities.

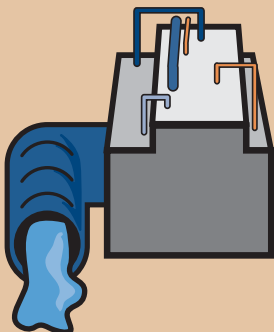


Inflatable Dam



Deep Tunnel

Plan 2: Storage and Remote Treatment

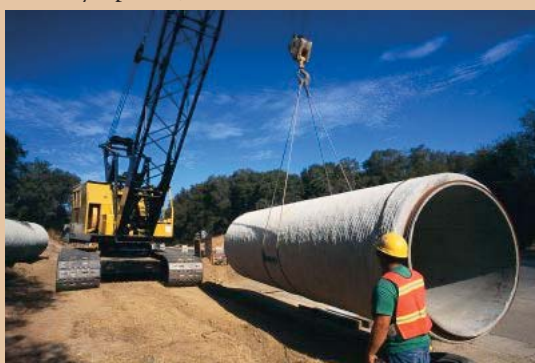


Plan 2 is similar to Plan 1. Instead of one tunnel, it would have three deep tunnels (along White River, Pogues Run and Fall Creek). Similar to Plan 1, it would have underground storage tanks and new sewers to capture raw sewage that would otherwise overflow into the streams. Plan 2 also would include remote treatment facilities at the downstream end of the Pogues Run and Fall Creek tunnels. These treatment facilities would treat wet-weather flows that exceed the tunnels' capacity. The city's central treatment plants also would be expanded. Again, the city evaluated five different sizes for these facilities, achieving 90, 93, 95, 97 or 99 percent capture of sewer flows in a typical year. Total costs range from \$1.55 billion to \$3.03 billion, depending on the size of the facilities.



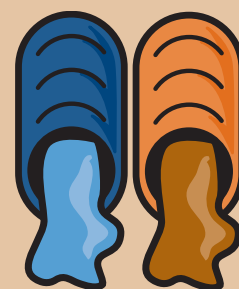
Remote Treatment

Plan 3 would completely separate combined sewers in all areas to eliminate raw sewage overflows. Existing combined sewers would be converted to either a separate sanitary sewer or a separate storm sewer. New sewers would be installed in all combined sewer neighborhoods, and all homes and businesses would be re-connected to the separated sewers. The city's treatment plants would not be expanded under this plan. Total sewer separation is the most costly option, estimated at \$6.2 billion.



Sewer Separation

Plan 3: Sewer Separation



Which Plan Option Was Preferred?

The city's analysis identified storage and conveyance (Plan 1) as the best alternative, based on the following factors:

- **Neighborhood Impacts:** Storage and conveyance will have the least impact on neighborhoods. Sewer separation projects would severely disrupt many neighborhoods and businesses in our community.
- **Environmental Benefits:** Storage and conveyance and storage with remote treatment achieve about the same environmental benefits. Sewer separation would increase urban stormwater pollution in our streams.
- **Treatment Quality:** Storage and conveyance will provide higher quality treatment than storage with remote treatment by using the city's advanced wastewater treatment facilities.
- **Recreational Benefits:** No alternative would allow our streams to achieve the state standard for swimming at all times. However, all three plans will reduce the number of days that *E. coli* bacteria values are ten or more times the safe swimming standard.
- **Cost:** Storage and conveyance is the lowest-cost alternative. Sewer separation, the only option that would eliminate overflows, has adverse environmental consequences of its own (in terms of increased stormwater discharges) and would be extremely expensive at \$6.2 billion.

How Were Indianapolis Residents Involved in Selecting the Plan?

This plan represents the largest public works project in the city’s history. Therefore, the city conducted extensive public outreach before deciding upon a plan.

Since the 1990s, the City of Indianapolis has worked with two committees that provide advice and input on sewer overflow issues. Since 2002, the committees have been meeting together as the Clean Stream Team Advisory Committee. The committee includes local experts on engineering and environmental policy, neighborhood and environmental advocates, and representatives from the Marion County Health Department and U.S. Geological Survey. They were involved in reviewing the city’s analysis of alternatives as it was developed.

The city also conducted extensive public outreach and education on overflow issues in 2000 before submitting its first plan to IDEM and U.S. EPA in 2001. Our public outreach program also included many public meetings, surveys, overflow notices, educational mailings, overflow warning signs, a Web site and other activities.

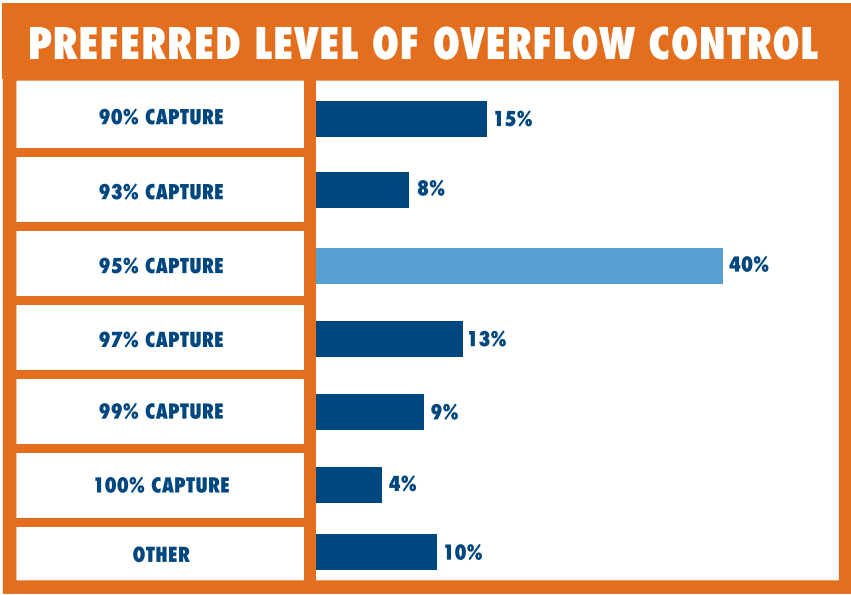
In October 2004, the city sought additional public input on the final options for reducing raw sewage

overflows. The city received responses through public meetings, mail-in response cards and its Web site. After reviewing the city’s analysis of the plan options, costs and benefits, residents were asked to provide input on the following issues:

- 1. Potential neighborhood impacts from sewer overflow repairs
- 2. Environmental benefits and cost impacts of sewer overflow control projects
- 3. How much they would be willing to pay to clean our waterways, ranging from 90 percent to 100 percent capture of overflows
- 4. Whether more resources and higher controls should be placed on some streams rather than others
- 5. Their preferred plan option (Plan 1, Plan 2 or Plan 3)

Of the residents who responded, 59 percent preferred Plan 1 (storage/conveyance). Forty percent preferred the 95 percent capture level of control, as shown in **Figure 4**.

Figure 4



What Can Our City and its Residents Afford?

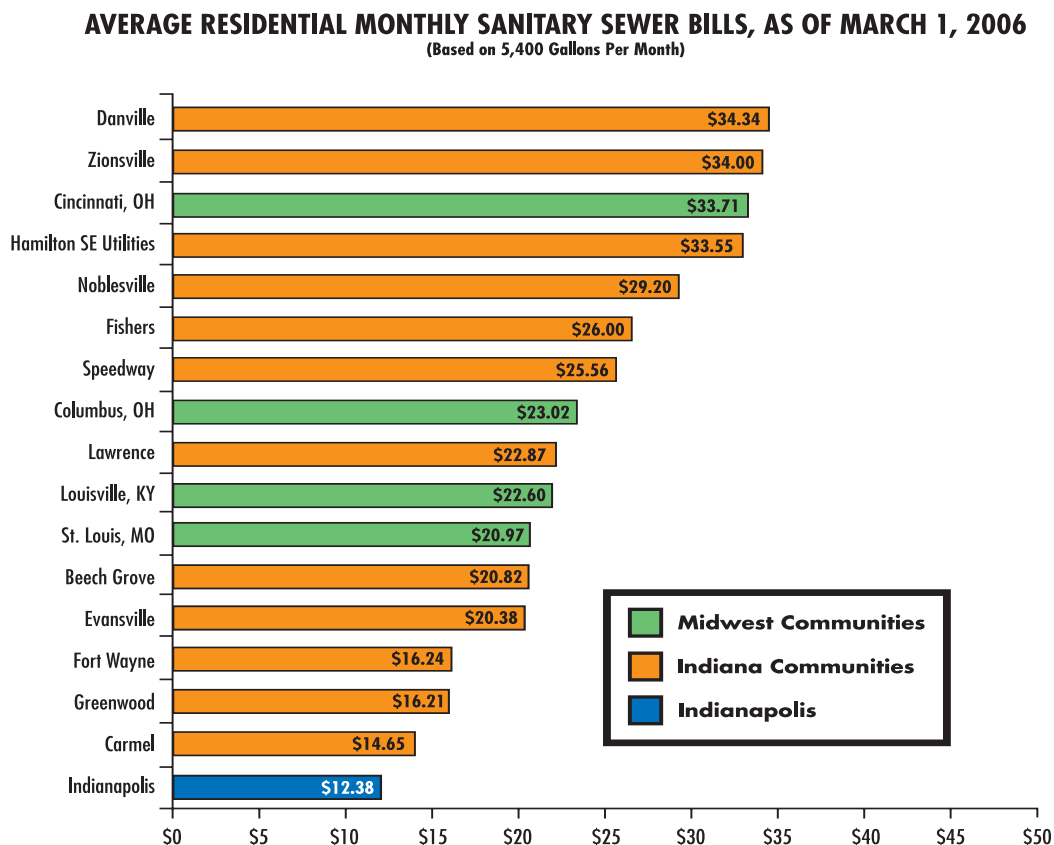
Federal requirements to implement the sewer improvement plan will be costly. During the next 20 years, revenue requirements for the city's wastewater system will increase by about 12 percent per year, on average. This will significantly impact industrial, commercial and residential sewer rates. Impacts will be felt most deeply in Center Township and by people throughout the county living below poverty level.

A 20-year schedule will allow the city to: construct control measures in a planned and orderly manner; limit disturbance to neighborhoods; coordinate with other projects; accurately evaluate the effectiveness of each project; coordinate technical, human resource and material needs; and manage the financial burden on ratepayers.

During this same time period, other investments will be needed to upgrade and maintain our entire sewer system and to keep our treatment plants and equipment in good condition. Rate increases will be needed every year or two to finance these clean water infrastructure projects. However, Indianapolis sewer rates are among the most affordable in the state and nation, as shown in Figure 5 below.

On October 31, 2005, the City-County Council approved a phased three-year rate increase to fund the Clean Streams-Healthy Neighborhoods program, including planning, design and construction of sewer system and wastewater treatment plant improvements between 2006-2008. Average residential rates will be \$12.38 in 2006, \$15.17 in 2007 and \$17.96 in 2008.

Figure 5



What Plan Did the City Select?

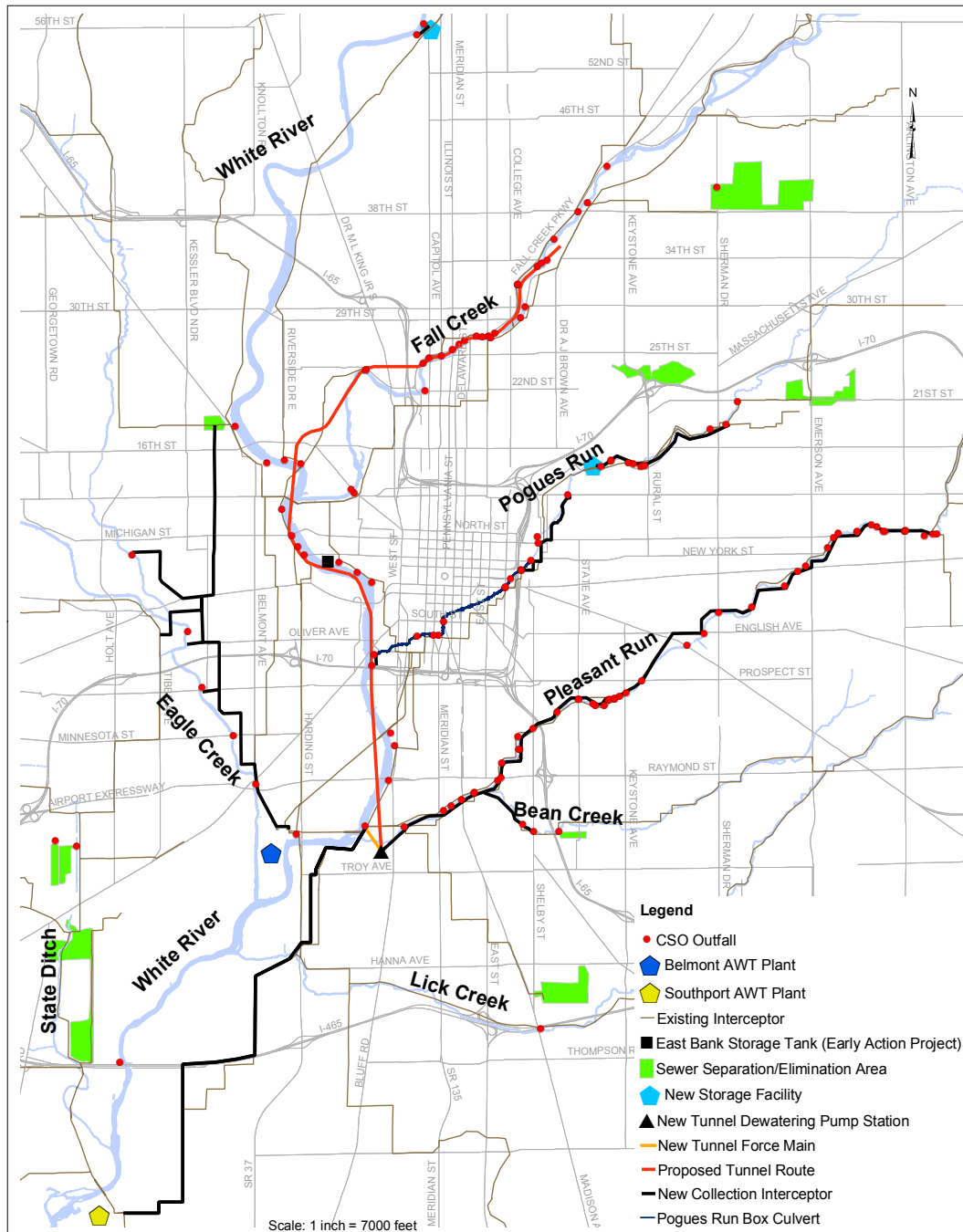
The city will build storage and conveyance facilities designed to capture 97 percent of wet-weather sewer flows on Fall Creek and 95 percent on other waterways. This will capture all but a few large storms in a typical year. During the infrequent storms when overflows will still occur, White River and neighborhood streams are unsafe due to high flows. In an effort to protect our streams when people are most likely to use them, the city also will implement other watershed improvement projects that are not a required component of the long-term control plan to control bacteria that affect our streams during dry weather. The plan's estimated cost is \$1.73 billion in 2004 dollars. It will be implemented over 20 years, with a target completion date of December 31, 2025. A map of the plan is shown in **Figure 6**.

Major components of the plan include:

- A deep underground tunnel along Fall Creek and White River will store and carry sewage to the city's wastewater treatment plants. The 224-million-gallon tunnel would be built several hundred feet below the ground surface to store overflows during a storm. After the storm passes, wastewater in the tunnel will be pumped to the wastewater treatment plants for treatment. Tunnels can provide a large storage volume with very little disturbance to the ground surface, making them a preferred option in urban areas. Sewage storage tunnels have been built in Chicago; Cleveland; Milwaukee; Toledo; Portland, Ore.; Richmond, Va.; and other cities.
- New, larger sewers along Pogues Run, Pleasant Run, Bean Creek and parts of Fall Creek and White River will be built to capture overflows and carry them to the central tunnel. Most sewers would be installed by digging open trenches, with limited sections installed by small-scale tunneling.
- A new sewer along Eagle Creek will carry wet weather flows to the Belmont Advanced Wastewater Treatment Plant.
- An underground, self-cleaning storage tank near Spades Park will capture and store overflows from upper Pogues Run. The stored sewage would be pumped to the city's treatment plants after a storm.
- Using one-half of the existing Pogues Run tunnel under downtown for sewer overflow storage and relocating overflows on lower Pogues Run to this tunnel. This project is underway.
- Upgrades to an existing storage facility at Riviera Club to capture and store overflows from upper White River.
- An underground storage tank completed in 2004 along White River near the campus of Indiana University-Purdue University at Indianapolis. Stored sewage is pumped to the treatment plants after a storm, and the tank has an automatic self-cleaning system.
- Inflatable dams and pinch valves at key points in the sewer system. These devices help save money by using existing sewer lines to contain and reduce raw sewage overflows. Eventually, electronic sensors will send data to a centralized computer, allowing remote and real-time control of flows within the sewer system. The city has already installed several of these devices.
- Local sewer separation projects to eliminate isolated overflows on White River, State Ditch, Lick Creek and the upstream ends of Fall Creek, Pogues Run and Bean Creek.
- Significant improvements to both Belmont and Southport Advanced Wastewater Treatment Plants to increase their ability to store and treat incoming flows during wet weather.
- A new sewer pipe connecting the two treatment plants, enabling the city to better manage and treat flows during wet weather.

In order to meet Clean Water Act requirements, the city also will implement projects to eliminate chronic and constructed overflows in the separate, sanitary sewer system at an additional cost.

Figure 6 - Map of Selected Plan



Additional Watershed Improvements

To achieve maximum benefits to public health and the environment, the city also plans to implement programs to replace failing septic systems, restore streambanks to more natural conditions, augment stream flow during dry weather, and improve oxygen levels when needed through aeration in area streams. These projects

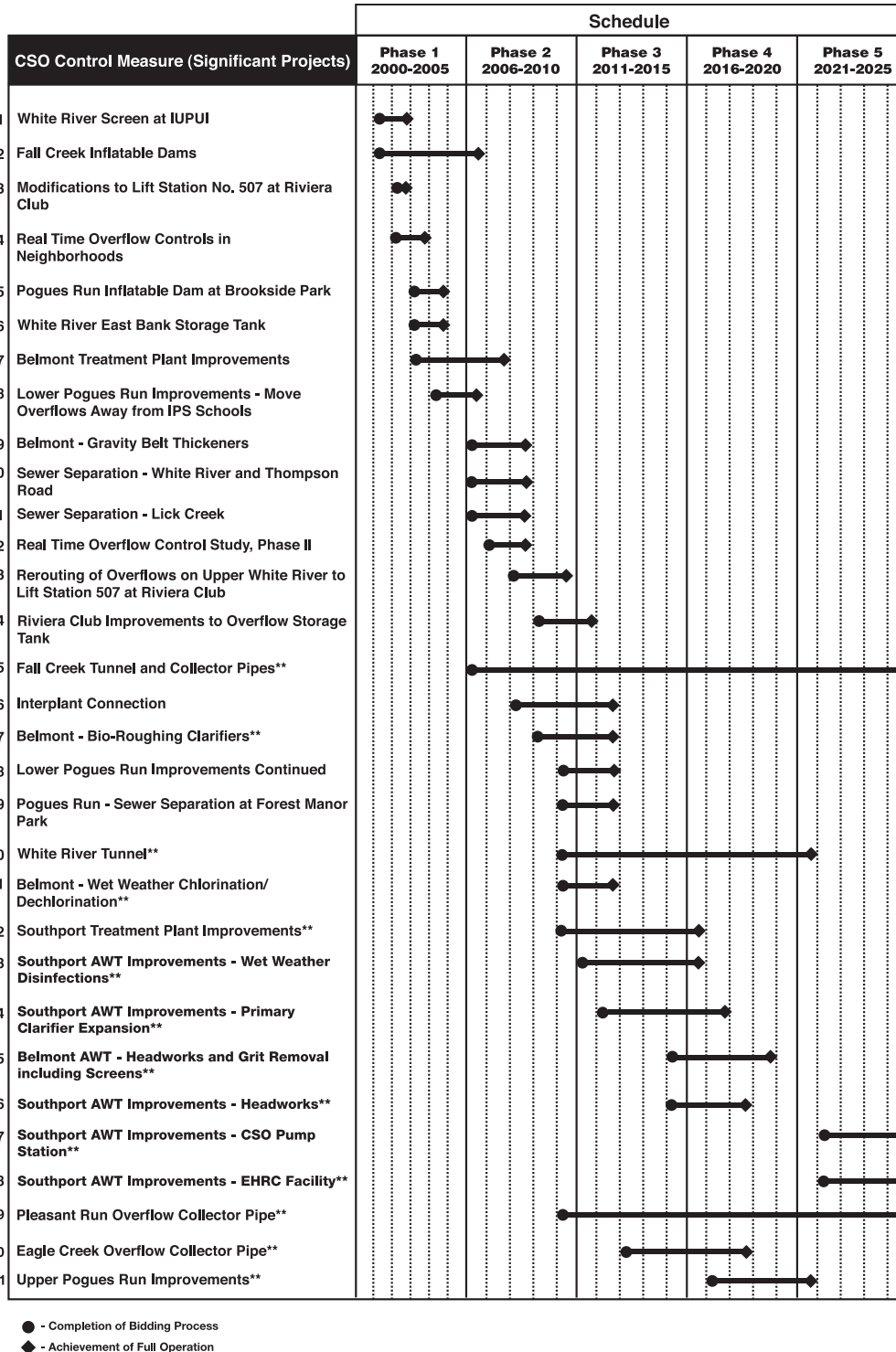
will be implemented as needed and at the city's discretion, since they are not directly related to raw sewage overflow control. However, these projects will provide tangible benefits to water recreation.

When Will Projects Be Built?

The program will be implemented in five phases, over 20 years. The city needs enough time to build projects in a planned and orderly manner; minimize disturbance to neighborhoods; accurately evaluate the effectiveness of each project; secure rights of way; coordinate

technical, manpower and material needs; as well as to manage the financial burden on ratepayers. A schedule of significant projects is shown in **Figure 7**.

Figure 7



What Benefits Will We See?

This plan, the largest investment in clean water infrastructure in our history, will have many benefits to our streams and our community. It will improve the ability of our sewer system to handle rainfall and snowmelt, so they would only overflow during the largest storms each year.

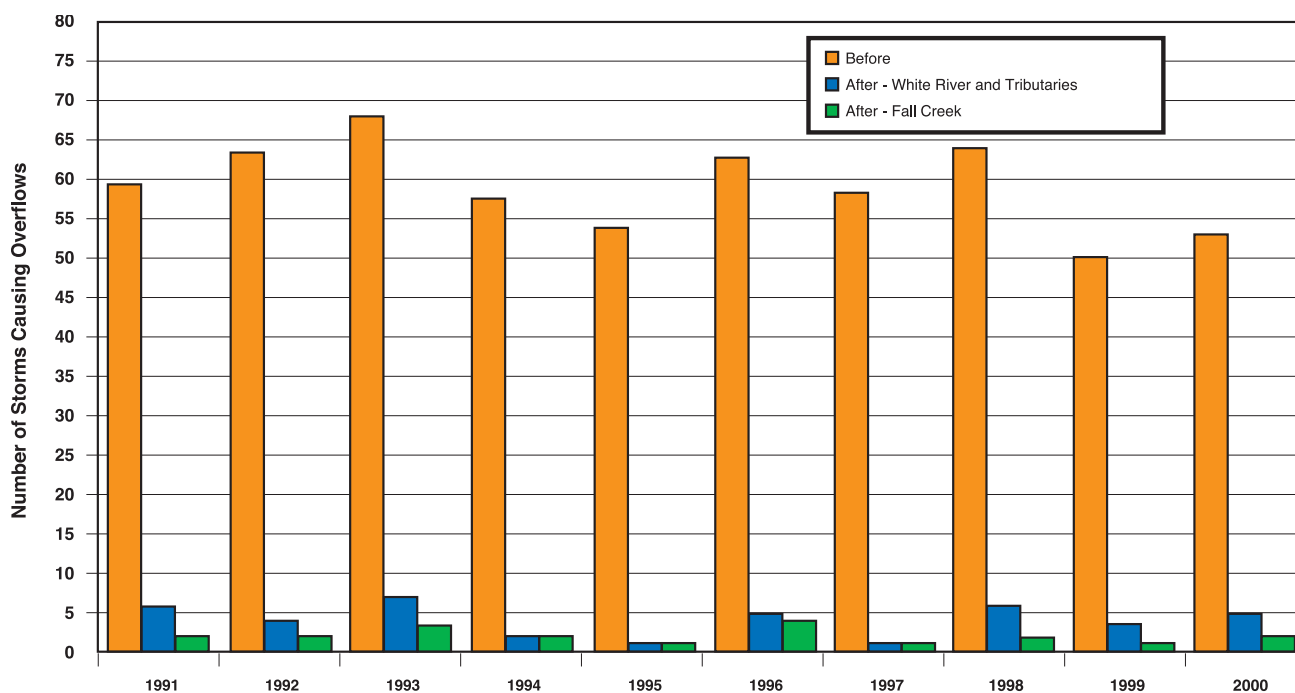
In an average year, this plan will be designed to capture and treat 97 percent of wet-weather flow in the sewers along Fall Creek and 95 percent along White River and other streams. We expect sewer overflows to occur twice in a typical year on Fall Creek and four times on other waterways. In any given year, however, rainfall conditions will cause overflow frequency to vary, with more overflows occurring during wet years than dry years. We expect overflows to occur during 0-6 storms each year on Fall Creek and 0-10 storms on other waterways, compared to the current 45-80 storms per year. Figure 8 shows how overflow frequency is

expected to fall, using rainfall records from 1991-2000. The orange bar reflects the number of storms that caused overflows in the past, while the blue/green bars show how the new sewer improvements will capture most (but not all) storms each year.

The plan also will:

- Dramatically reduce the amount of sewage overflowing into our streams, as shown in Figure 9 (next page).
- Improve oxygen levels for fish during and immediately after wet weather.
- Reduce *E. coli* bacteria levels and other pathogens in our streams.
- Improve the quality of the water during rain and snow storms for fish and other aquatic wildlife.

Figure 8 - Overflow Frequency Before and After Plan is Implemented



Source: 1950-2003 NetSTORM Simulation. Baseline Conditions and Selected LTCP.

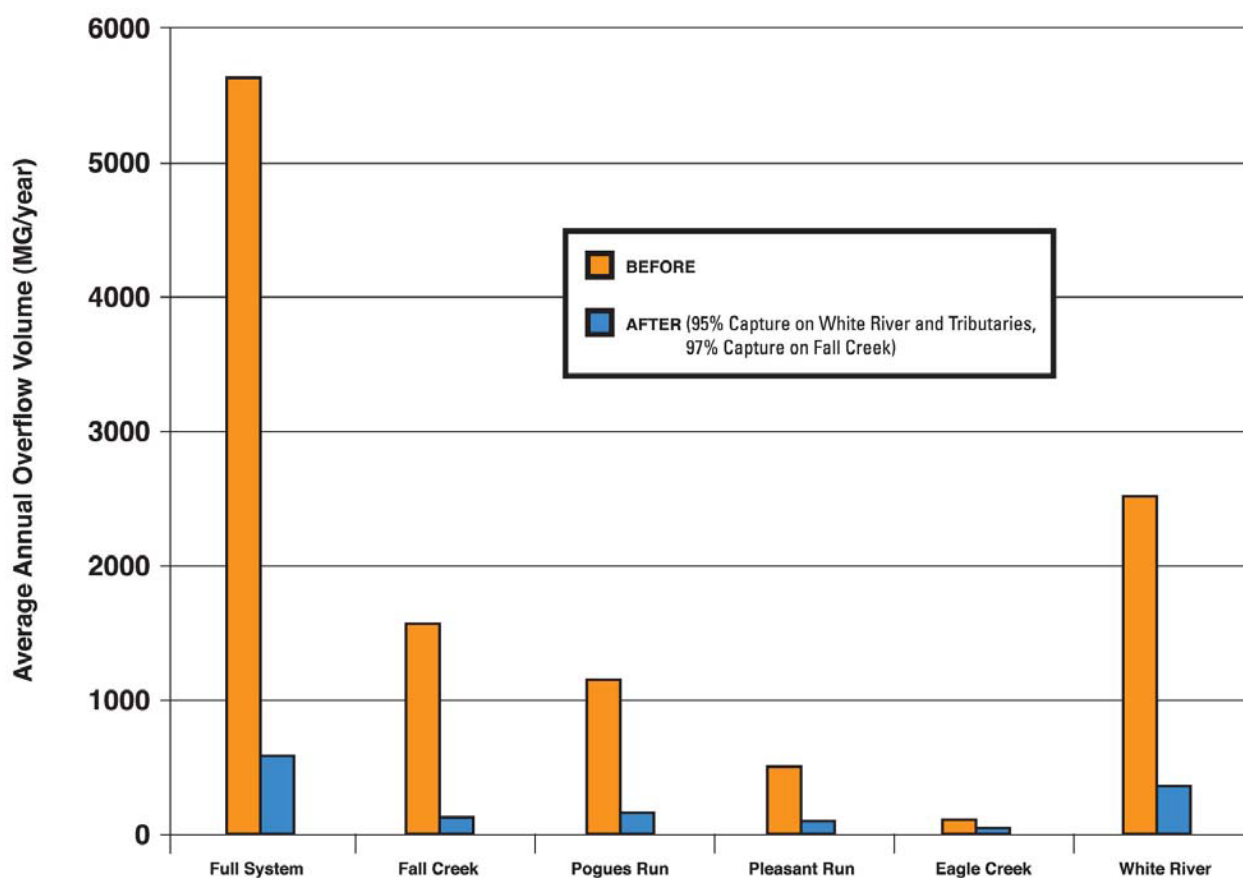
Note: (1) For before conditions, there is an average annual frequency of 60 overflow events per year. The distribution of the 60 events is based on the 54-year precipitation record.
 (2) It is estimated that at least one CSO outfall structure would discharge for the listed number of dates each year.

- Significantly reduce or eliminate odors, untreated sewage, and trash in neighborhood streams.
- Provide a higher level of overflow control on Fall Creek because of the cost-effectiveness of building a slightly larger tunnel.

involves construction below the surface. During implementation, the city will need to identify and resolve any uncertainties and seek to adjust the schedule as needed. Additionally, changes in laws, requirements or regulations could require changes to the plan and the schedule.

Based on the city's experience with early action projects, unforeseen circumstances will arise during construction, particularly when the work

Figure 9 - Overflow Volume Before and After Plan is Implemented



Will the Plan Comply with State Standards?

Currently, the White River and its tributaries do not meet two state standards: dissolved oxygen standards to protect fish and bacteria standards to protect recreation.

The plan will ensure that our streams meet dissolved oxygen standards designed to protect fish and other aquatic life.

During wet weather (and even in dry weather) our streams are often not suitable for recreation due to bacteria from sewer overflows, stormwater, agricultural runoff, septic systems and other reasons. Our analysis indicates that 20 to 40 percent of dry-weather samples do not meet the state's bacteria standard. Separate city and state efforts will continue to address pollution sources not related to the city's wastewater collection and treatment systems.

Even after the plan is implemented, affected streams will not always meet the state's existing standards that protect swimming. Some pollutant sources will remain during dry weather. Also, some raw sewage overflows will occur during and for some time after the largest storm events. However, streams aren't safe for swimming during those large storms, as shown in the photographs at right. State and federal law and regulations provide a process to refine standards for a waterway when the standards can't be met. This requires development of a Use Attainability Analysis, or UAA, and the appropriate revision to the water quality standards.

The city is seeking state and federal approval for a "wet weather limited use" for affected waterways. This limited use recognizes that the swimming goal can't always be met during large storm events, when water quality is unsafe and people aren't swimming due to high stream flows. The 2005 Indiana General Assembly created the wet weather limited use for commu-

nities with combined sewer overflows, but we must meet several requirements in state and federal law.

The city is requesting state and federal approval of its request for revision to water quality standards during the first five years of the plan's implementation. Without approval during this time, the city will face regulatory uncertainty and financial risks if it begins construction on projects that don't meet the current bacteria standards.



The photograph above shows an area known as "Pleasant Run Falls" during dry weather. On the lower right-hand corner of the photograph, you can see the stream flowing as a very small trickle of water.



This photograph shows Pleasant Run Falls following a large storm, when the stream clearly is not safe for recreation. The city's plan won't completely capture all overflows during this large storm because the added cost would yield no additional benefit in restoring recreational uses.

How Will We Monitor Our Progress?

The city will monitor streams and new facilities after construction to make sure projects are working as designed and to measure their effectiveness in capturing sewage and reducing overflows. The program will include the following elements:

- A monitoring program to track the performance of new facilities and pollution levels at various locations in affected streams,
- Periodic analysis of monitoring data to see if the plan is achieving the desired results, and
- Continued input from citizens, businesses and community groups about the status of the project.

The city will submit milestone reports for each waterway to IDEM and U.S. EPA following construction of all projects along that waterway. In addition, the city will issue public reports that describe progress in the design, construction, and effectiveness of water quality improvement projects. As individual projects are implemented, the city will conduct extensive outreach to affected neighborhoods.

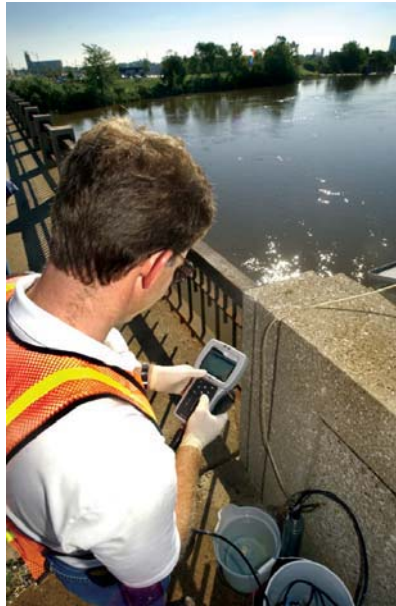


Photo courtesy of Indianapolis Star (Charlie Nye)

The city works with the Marion County Health Department to monitor all streams on a monthly basis, and also collects continuous dissolved oxygen data from eight locations. Water quality monitoring data will be used to track stream improvements from the sewage overflow control projects and other city investments in clean water infrastructure.

How Can I Learn More or Get Involved?

The executive summary provides an easy-to-understand overview of the city's plan and how it was developed. For more technical detail on the selected plan, its estimated costs, projected benefits and the proposed schedule of projects, see Section 7 of the full long-term control plan. The full plan also contains more detailed information on the condition of our waterways, overflow reduction technologies, the city's analysis of alternatives and our post-construction monitoring program.

The full contents of the plan are available at www.indycleanstreams.org. You also can review a full copy of the plan at the following locations during normal business hours:

Indianapolis Clean Stream Team

151 N. Delaware Street, Suite 900
Indianapolis, IN 46204
Phone: 317-327-8720

Indianapolis Department of Public Works

604 N. Sherman Drive, Indianapolis

All Indianapolis-Marion County Public Library Branches

You also may request an electronic copy of the plan on compact disc by calling 317-327-8720. People with visual disabilities may request full copies of the plan in an alternate format by calling 317-327-4669.



To keep informed about the plan's progress, sign up at www.indycleanstreams.org to join the Clean Stream Team. You will receive email notices of meetings, copies of our quarterly Stream Line newsletter, and progress reports on the plan.

Everyone has a role in cleaning our waterways – individuals, government, non-profit organizations, businesses, industry, and community groups. Here are some actions that you can take to protect our waterways and become part of the Indianapolis Clean Stream Team:

- Keep gutters and storm sewer drains clear of debris.
- Properly dispose of motor oil, antifreeze, battery acid and household chemicals. (Call 317-327-4TOX to learn how).
- Disconnect downspouts and sump pumps connected to the sewer system.
- Dispose of pet waste properly.
- Learn how you can reduce water use in your homes and businesses, and help keep pollution out of the storm drains.
- Compost leaves, branches and grass clippings.
- Invite the city's Clean Stream Team members to make a presentation to your civic association or neighborhood group. Call us at 317-327-8720.

